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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/727,725	12/01/2000	Harry C. Buchanan JR.	VAL-380-B	4839
7	590 07/01/2003			
ATTN: Andrew R. Basile			EXAMINER	
YOUNG & BA SUITE 624	,		HANSEN, CO	COLBY M
3001 WEST BI TROY, MI 48	IG BEAVER ROAD 8084-3107		ART UNIT	PAPER NUMBER
			3682	

DATE MAILED: 07/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.



# Office Action Summary

Application No. **09/727,725** 

Applicant(s)

Buchanan JR. et al.

Examiner

Colby Hansen

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	LLUNINI IRNI IRIA IRIA IRIA IRIA IRIA IRIA			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address				
Period for Reply				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.				
- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In	no event, however, may a reply be timely filed after SIX (6) MONTHS from the			
mailing date of this communication.  If the period for reply specified above is less than thirty (30) days, a reply within the				
<ul> <li>If NO period for reply is specified above, the maximum statutory period will apply a</li> <li>Failure to reply within the set or extended period for reply will, by statute, cause to</li> </ul>	and will expire SIX (6) MONTHS from the mailing date of this communication.			
Any reply received by the Office later than three months after the mailing date of the earned patent term adjustment. See 37 CFR 1.704(b).				
earned patent term adjustment. See 37 CFR 1.704(b).  Status				
1) Responsive to communication(s) filed on Apr 16, 2	2003			
	tion is non-final.			
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11; 453 O.G. 213.				
Disposition of Claims				
4) 💢 Claim(s) <u>1-38 and 40-47</u>	is/are pending in the application.			
	is/are withdrawn from consideration.			
5) Claim(s)				
6) 🔀 Claim(s) <u>1-10, 27-38, and 40-47</u>				
7) Claim(s)	is/are objected to.			
	are subject to restriction and/or election requirement.			
Application Papers				
9) $\square$ The specification is objected to by the Examiner.				
10) The drawing(s) filed on is/are	e a) $\square$ accepted or b) $\square$ objected to by the Examiner.			
Applicant may not request that any objection to the d				
	is: a) □ approved b) □ disapproved by the Examiner.			
If approved, corrected drawings are required in reply				
12) The oath or declaration is objected to by the Exam	iner.			
Priority under 35 U.S.C. §§ 119 and 120				
13) 💢 Acknowledgement is made of a claim for foreign p	riority under 35 U.S.C. § 119(a)-(d) or (f).			
a) ☑ All b) □ Some* c) □ None of:				
1. X Certified copies of the priority documents have	ve been received.			
2.   Certified copies of the priority documents have	ve been received in Application No			
application from the International Bure				
*See the attached detailed Office action for a list of th				
14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).				
a) The translation of the foreign language provisions				
15) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.				
Attachment(s)				
1) Notice of References Cited (PTO-892)	4) Interview Summary (PTO-413) Paper No(s).			
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) Notice of Informal Patent Application (PTO-152)			
3) Information Disclosure Statement(s) (PTO-1449) Paper No(s).	6) Other:			

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#### **DETAILED ACTION**

## Response to Arguments

1. In view of the Appeal Brief filed on 4/16/2003, PROSECUTION IS HEREBY REOPENED. A new grounds of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
  - (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

### Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-10 and 27-47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claims 1-10 and 27-47, are replete with "double inclusion" errors, wherein within the preamble or other preceding portion of the claim applicant claims a structure, then later in the claim, claims the same structure without the appropriate "the" or "said" preposition. The errors found by the Examiner are as follows:

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-Claim 1, line 5-6: "a plurality of ball bearings":
-Claim 1, line 6: "a crossover passage":
-Claim 27, line 5-6: "a plurality of ball bearings";
-Claim 27, line 7: "a crossover passage";
-Claim 37, line 6: "a plurality of ball bearings";
-Claim 37, line 6-7: "a crossover passage";
-Claim 38, line 5-6: "a plurality of ball bearings";
-Claim 38, line 6: "a crossover passage";
-Claim 40, line 2: "a helical portion";
-Claim 40, line 3-4: "a first end to a second end";
-Claim 40, line 5: "a crossover passage";
-Claim 41, line 3: "a longitudinally adjacent crossover passage portion";
-Claim 42, line 2: "a helical portion";
-Claim 42, line 3: "a first end to a second end";
-Claim 42, line 5: "a crossover passage";
-Claim 43, line 2-3: "a longitudinally adjacent crossover passage portion";
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- -Claim 44, line 5-6: "a crossover passage";
- -Claim 44, line 16: "a plurality of ball bearings";
- -Claim 47, line 6: "a crossover passage";
- -Claim 47, line 6-7: "a plurality of ball bearings".

### Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 38, and 40-43 are rejected under 35 U.S.C. 102(b) as being anticipated by Nilsson (US Pat. 4,364,282).

Nilsson (US Pat. 4,364,282) discloses in a ball unit (fig. 1) having at least one internal bearing race with a first end and a second end, and a crossover passage (fig. 2) for connecting the first end and the second end to form a continuous recirculating path of a plurality of ball bearings 17, the improvement comprising:

a ball nut body (fig. 1) with at least one helix passage for receiving the plurality of ball bearings 17, the crossover passage formed to define an individual raceway for each helix passage, each raceway having a separate, single orbit, recirculating rotational path, the ball nut body having an elongate, generally cylindrical-shaped, metal body;

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means for forming the helical portion of each recirculating path to extend less than an entire circumference of an interior of the ball nut body from the first end to the second end;

means for forming the crossover passage portion of each recirculating path to extend in communication between the first and the second end of the corresponding helical portion;

means for angularly offsetting each crossover passage portion with respect to the longitudinally adjacent crossover passage portion; and

the crossover passage portion of each recirculating path formed in communication between the first and the second end of the corresponding helical portion;

each crossover passage portion angularly offset with respect to the longitudinally adjacent crossover passage portion.

#### Double Patenting

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1-10, 27-38, and 40-47 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-57 of U.S. Patent No. 6,192,585. Although the conflicting claims are not identical, they are not patentably distinct from each other because each discloses a substantially identical bearing structure with a first end having an eyelet, a second end having an eyelet, the two ends put together is a face-to-face means and attached at flanges at the face-to-face portion by a clip..

# Response to Arguments

8. Applicant's arguments filed 4/16/2003 have been fully considered but they are not persuasive.

With regard to the 102 rejection of claims 38, and 40-43 by Nilsson (US Pat. 4,364,282), applicant argues that Nilsson (US Pat. 4,364,282) does not disclose an elongate generally cylindrical shaped metal injection molded body. Examiner disagrees that the aforementioned

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rejection is erroneous as within Nilsson (US Pat. 4,364,282) the body is a metal cylinder (See col.1, lines 36-40). As for being injection molded, such a product-by-process limitation has no patentable weight within an apparatus claims.

9. Applicant's arguments with respect to claims 1-10, 27-38, and 40-47 have been considered but are most in view of the new ground(s) of rejection.

#### **FACSIMILE TRANSMISSION**

Submission of your response by facsimile transmission is encouraged. Group 3600's facsimile number is (703) 305-3597. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission, see MEP. 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check should not be submitting by facsimile transmission separately from the check.

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(Signature)

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Responses submitted by facsimile transmission should include a Certificate of Transmission (MEP. 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is bei	ng facsimile transmitted to the Patent and
Trademark Office (Fax No. (703) 305-3597) o	on
	(Date)
Typed or printed name of person signing this	certificate:

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MEP. 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

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#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Colby Hansen whose telephone number is (703) 305-1036. The examiner can normally be reached on Monday through Thursday and every other Friday from 7:30 PM to 5:00 PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bucci, can be reached on (703) 308-3668. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-2168.

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Colby M. Hansen /

Patent Examiner